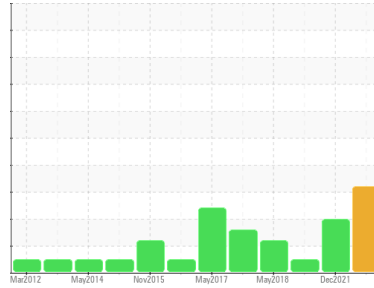


PROBLEM SUMMARY

Sample Rating Trend



WATER



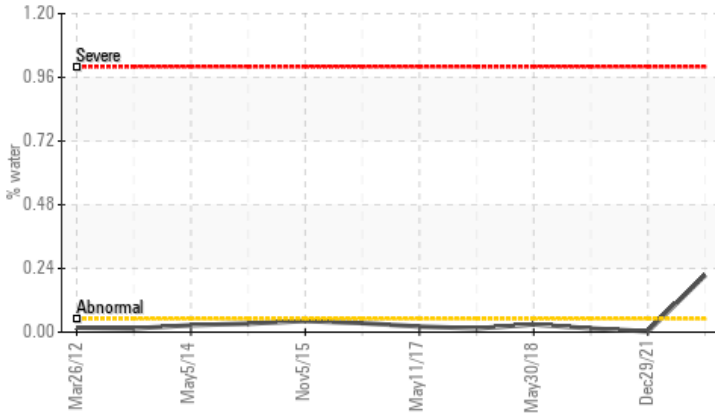
Machine Id
KAESER SK20T 4161703 (S/N 1028)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

There is too much water present in this sample to perform a particle count. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	▲ 0.214	0.003	0.014
ppm Water	ppm	ASTM D6304	>500	▲ 2140	25.7	140
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG	NEG
Free Water	scalar	*Visual		▲ 2.0	NEG	NEG

Customer Id: THENAZ
Sample No.: KC104875
Lab Number: 05636507
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

29 Dec 2021 Diag: Jonathan Hester

WEAR



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



23 Jan 2019 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system is acceptable. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



30 May 2018 Diag: Angela Borella

ISO



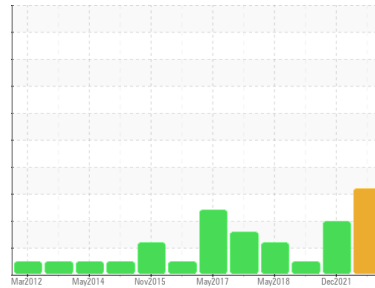
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.

view report



Machine Id
KAESER SK20T 4161703 (S/N 1028)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)



DIAGNOSIS

▲ **Recommendation**

There is too much water present in this sample to perform a particle count. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

▲ **Contamination**

There is a light concentration of water present in the oil. Free water present.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			KC104875	KC89602	KC68254
Sample Date			11 Aug 2022	29 Dec 2021	23 Jan 2019
Machine Age	hrs		18171	13847	10296
Oil Age	hrs		5000	1659	549
Oil Changed			Not Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	1	14	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	▲ 10	<1
Lead	ppm	ASTM D5185m >10	0	<1	<1
Copper	ppm	ASTM D5185m >50	5	3	<1
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m 90	1	1	38
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 90	6	1	90
Calcium	ppm	ASTM D5185m 2	0	0	0
Phosphorus	ppm	ASTM D5185m	22	192	<1
Zinc	ppm	ASTM D5185m	10	61	4

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	0	<1	<1
Sodium	ppm	ASTM D5185m	<1	4	9
Potassium	ppm	ASTM D5185m >20	0	0	1
Water	%	ASTM D6304 >0.05	▲ 0.214	0.003	0.014
ppm Water	ppm	ASTM D6304 >500	▲ 2140	25.7	140

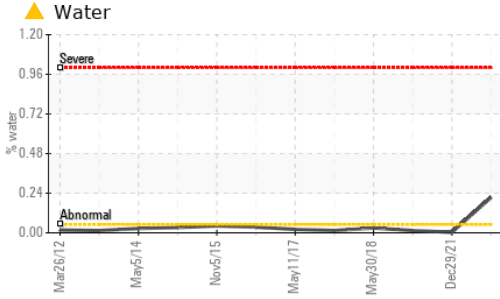
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		---	23997	6331
Particles >6µm	ASTM D7647	>1300	---	▲ 5130	941
Particles >14µm	ASTM D7647	>80	---	▲ 214	26
Particles >21µm	ASTM D7647	>20	---	▲ 38	7
Particles >38µm	ASTM D7647	>4	---	2	0
Particles >71µm	ASTM D7647	>3	---	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	▲ 20/15	17/12

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.37	0.40	0.368

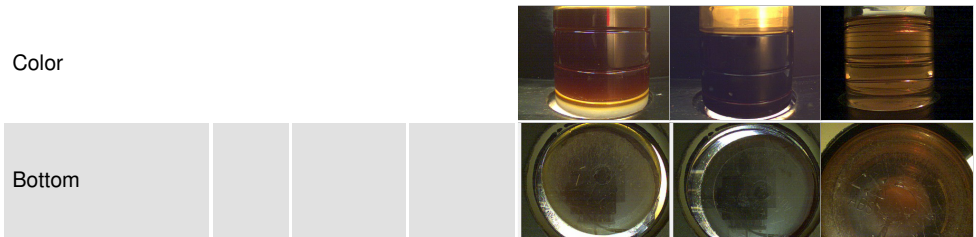
OIL ANALYSIS REPORT



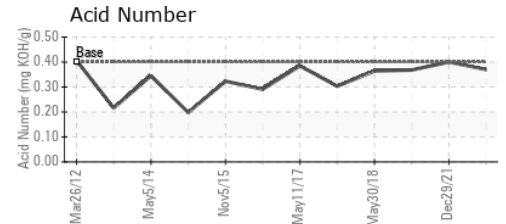
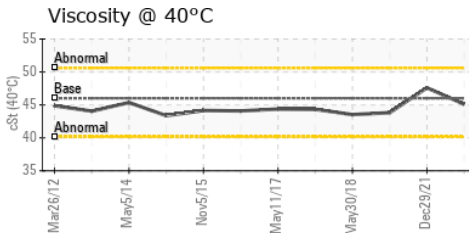
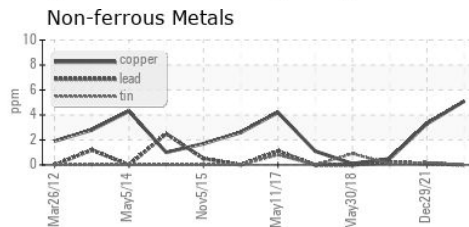
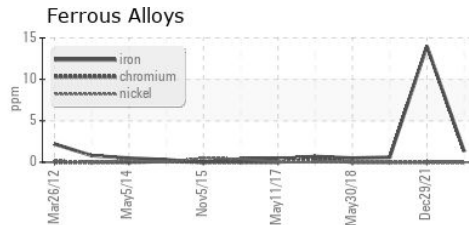
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ 2.0	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	45.1	47.6

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC104875 **Received** : 08 Sep 2022
Lab Number : 05636507 **Diagnosed** : 09 Sep 2022
Unique Number : 10126037 **Diagnostician** : Don Baldrige
Test Package : IND 2

THERMO FISHER SCIENTIFIC
 6771 SILVERCREST RD
 NAZARETH, PA
 USA 18064
 Contact:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: